

Title (en)  
RAPID TARGETING ANALYSIS IN CROPS FOR DETERMINING DONOR INSERTION

Title (de)  
SCHNELLE TARGETING-ANALYSE BEI KULTURPFLANZEN ZUR BESTIMMUNG VON SPENDEREINSATZ

Title (fr)  
ANALYSE PAR CIBLAGE RAPIDE DANS DES CULTURES POUR DÉTERMINER UNE INSERTION DE DONNEUR

Publication  
**EP 3041344 A4 20170419 (EN)**

Application  
**EP 14843150 A 20140903**

Priority

- US 201361873719 P 20130904
- US 201361899569 P 20131104
- US 2014053832 W 20140903

Abstract (en)  
[origin: US2015064708A1] The present disclosure provides methods for detecting and identifying plant events that contain precision targeted genomic loci, and plants and plant cells comprising such targeted genomic loci. The method can be deployed as a high throughput process utilized for screening a donor DNA polynucleotide insertion at the targeted genomic loci. The methods are readily applicable for the identification of plant events produced via a targeting method which results from the use of a site specific nuclease.

IPC 8 full level  
**A01H 1/00** (2006.01); **C07H 21/04** (2006.01); **C12N 5/04** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP RU US)  
**C12Q 1/6848** (2013.01 - EP); **C12Q 1/6895** (2013.01 - EP RU US)

C-Set (source: EP)  
**C12Q 1/6848** + **C12Q 2527/143**

Citation (search report)

- [XY] US 2011008833 A1 20110113 - PETOLINO JOSEPH F [US], et al
- [Y] US 2010063265 A1 20100311 - JOHNSON BRIAN [US], et al
- [XP] WO 2013169802 A1 20131114 - SANGAMO BIOSCIENCES INC [US], et al
- [E] WO 2015066638 A2 20150507 - DOW AGROSCIENCES LLC [US]
- [X] Z X XU ET AL: "A 16-bp RBE element mediated Rep-dependent site-specific integration in AAVS1 transgenic mice for expression of hFIX", GENE THERAPY, vol. 16, no. 5, 26 February 2009 (2009-02-26), GB, pages 589 - 595, XP055354436, ISSN: 0969-7128, DOI: 10.1038/gt.2009.9
- [A] WILLIAM M. AINLEY ET AL: "Trait stacking via targeted genome editing", PLANT BIOTECHNOLOGY JOURNAL, vol. 11, no. 9, 19 August 2013 (2013-08-19), pages 1126 - 1134, XP055218224, ISSN: 1467-7644, DOI: 10.1111/pbi.12107
- [A] SINGER TATJANA ET AL: "High-throughput TAIL-PCR as a tool to identify DNA flanking insertions", METHODS IN MOLECULAR BIOLOGY; [METHODS MOL. BIOL.; ISSN 1064-3745, VOL. 246], HUMANA PRESS, US, vol. 236, 1 January 2003 (2003-01-01), pages 241 - 272, XP009193710, ISSN: 1064-3745
- See also references of WO 2015034885A1

Cited by  
EP3066192B1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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**US 2015064708 A1 20150305; US 9765404 B2 20170919;** AU 2014315335 A1 20160317; AU 2014315335 B2 20170824; BR 102014021800 A2 20150915; BR 102014021800 B1 20220329; CA 2922823 A1 20150312; CA 2922823 C 20230117; CN 105682452 A 20160615; CN 105682452 B 20181016; EP 3041344 A1 20160713; EP 3041344 A4 20170419; EP 4279496 A2 20231122; EP 4279496 A3 20240313; IL 244338 A0 20160421; IL 244338 B 20190131; JP 2016533759 A 20161104; JP 6649258 B2 20200219; KR 102238137 B1 20210409; KR 20160050053 A 20160510; RU 2016112305 A 20171009; RU 2016112305 A3 20180403; RU 2668819 C2 20181002; TW 201542826 A 20151116; TW I672380 B 20190921; US 10087492 B2 20181002; US 2018010200 A1 20180111; WO 2015034885 A1 20150312

DOCDB simple family (application)  
**US 201414475968 A 20140903;** AU 2014315335 A 20140903; BR 102014021800 A 20140903; CA 2922823 A 20140903; CN 201480059724 A 20140903; EP 14843150 A 20140903; EP 23193206 A 20140903; IL 24433816 A 20160229; JP 2016540332 A 20140903; KR 20167008394 A 20140903; RU 2016112305 A 20140903; TW 103130581 A 20140904; US 2014053832 W 20140903; US 201715705447 A 20170915